

**REMARKS*****Summary of the Amendment***

Upon entry of the above amendment, Applicants will have amended claim 1 and added new claim 33 for consideration by the Examiner. Accordingly, claims 1 – 33 remain pending. However, as the Examiner has withdrawn claims 16 – 32, directed to the non-elected invention, from further consideration, only claims 1 – 15 and 33 are currently under consideration by the Examiner.

***Summary of the Official Action***

In the instant Office Action, the Examiner has rejected claims 1 – 15 over the art of record. Moreover, the Examiner has made the restriction requirement final, and, therefore, has withdrawn claims 16 – 32, directed to the non-elected inventions, from consideration. By the present amendment and remarks, Applicants submit that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

***Traversal of Rejection Under 35 U.S.C. §102(b)***

Applicants traverse the rejection of claims 1 – 15 under 35 U.S.C. § 102(b) as being anticipated by WO 01/98585 [hereinafter "WO '585"]. The Examiner asserts that WO '585 shows all of the features of the instant invention, including a wide nip calender upstream from a coating device. Applicants traverse the Examiner's assertions.

By way of background, Applicants note that the instant invention is directed to impregnating paper or cardboard webs with an impregnating agent in

order to obtain a web that at least in part acts in a hydrophobic manner. Moreover, web strength is improved. When such agents are applied to thin webs, it is relatively easy to press the agent into or through the web to ensure a consistent application of the agent over the entire cross-section of the web.

However, when thicker webs are utilized, it becomes more difficult to ensure this permeation of the agent into the web, such that the agent remains in areas on the surface. As a result, the web surface may be adequately hydrophobic, but the strength of the web is not adequately improved. While penetration of the agent into the web can be improved by operating under high pressure when applying the agent, a loss of volume occurs, which leads to a reduction in strength.

In order to overcome the above-identified defects, the instant invention positions the coating device and wide nip calender in such a manner that the web compression is still present when the web enters the coating device. In this manner, the expansion of the web draws the impregnating agent into the web. Accordingly, Applicants' independent claim 1, as now amended, recites, *inter alia*, a distance between said coating device and said wide nip calender is such that *web compression by said wide nip calender is still present when the web enters the coating device*. Applicants submit that WO '585 fails to disclose at least the above-noted feature.

While WO '585 discloses a wide nip calender followed by a coating device, Applicants note that there is no disclosure regarding the distance between the calender and the coating device, and certainly no disclosure that

web compression is still present when the web enters the coating device, as recited in at least independent claim 1.

In fact, Applicants note that, as WO '585 teaches a coating agent intended to act merely on the surface of the web, the applied art actually teaches against the features of the instant invention.

Because WO '585 fails to disclose each and every feature of the instant invention, Applicants submit that the Examiner has failed to establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b). Therefore, Applicants submit that the instant rejection is improper and should be withdrawn.

Further, Applicants submit that claims 2 – 15 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that WO '585 fails to anticipate, *inter alia*, the impregnating agent comprises a starch solution or other coating agents commonly used in paper upgrading, as recited in claim 2; the starch solution comprises a starch size, as recited in claim 3; the web comprises one of a paper or cardboard web, as recited in claim 4; the impregnating agent is applied to a web having a basis weight over 40 g/m<sup>2</sup>, as recited in claim 5; between said wide nip and said coating device, no other web processing devices are provided, as recited in claim 6; at least one guide device is arranged between said wide nip and said coating device, as recited in claim 7; said wide nip calender further comprises a heating device, as recited in claim 8; said heating device is formed

by said back pressure element, as recited in claim 9; said heating device comprises a surface structured to guide the web through said wide nip, and said surface having a temperature adjustable to at least 200°C, as recited in claim 10; said coating device comprises a film press, as recited in claim 11; further comprising a drying area located downstream of said coating device, as recited in claim 12; said wide nip is heated to a temperature higher than a temperature in said drying area, as recited in claim 13; said wide nip is adjustably heated to at least a plasticizing temperature of web fibers of the web, as recited in claim 14; and further comprising a reeling device arranged downstream of said coating device, wherein no glazing device is arranged between said coating device and said reeling device, as recited in claim 15.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1 – 15 under 35 U.S.C. § 102(b) and indicate that these claims are allowable.

***Traversal of Rejection Under 35 U.S.C. §103(a)***

1. *Over Baldini in view of Honkalampi*

Applicants traverse the rejection of claims 1 – 10 and 12 – 15 under 35 U.S.C. § 103(a) as being unpatentable over BALDINI (U.S. Patent No. 5,631,387) in view of HONKALAMPI et al. (U.S. Patent No. 6,146,198) [hereinafter “HONKALAMPI”]. The Examiner asserts that BALDINI shows the recited subject matter with the exception of a wide nip calender, but that it would have been obvious to modify BALDINI to include such a calender, as taught by HONKALAMPI. Applicants traverse the Examiner’s assertions.

Applicants note that the web is treated differently in the calenders of BALDINI and HONKALAMPI. In particular, Applicants note that BALDINI describes a device for impregnating a web in which a calender 26 is arranged ahead of a coating device 28. However, as the calender is symbolized by two rolls, Applicants submit that there is no teaching or suggestion of a wide-nip calender. In contrast, HONKALAMPI describes a wide-nip calender with a rotating jacket and a counter-pressure element embodied as a roll 22, between which a wide nip is embodied through which a web travel path is guided. As this wide-nip calender is intended to smooth the surface of the web, it is not discernible that the wide-nip calender of HONKALAMPI is to be used together with a coating device.

Moreover, Applicants note that neither BALDINI nor HONKALAMPI provide any teaching or suggestion of positioning the coating device such that web compression is still present when the web enters the coating device, as recited in at least independent claim 1, as now amended.

Because neither document teaches or suggests at least the above-noted features of the instant invention, Applicants submit that no proper combination of these documents can even arguably render unpatentable the instant invention as recited in at least independent claim 1, as now amended. Further, as BALDINI and HONKALAMPI are designed to treat the web differently from each other, Applicants submit that the art of record fails to provide the necessary motivation or rationale for combining the applied documents in the manner asserted by the

Examiner. Therefore, Applicants submit that, as the asserted combination of documents is improper, the asserted rejection should be reconsidered and withdrawn.

Further, Applicants submit that claims 2 – 10 and 12 – 15 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper combination of BALDINI and HONKALAMPI teaches or suggests, *inter alia*, the impregnating agent comprises a starch solution or other coating agents commonly used in paper upgrading, as recited in claim 2; the starch solution comprises a starch size, as recited in claim 3; the web comprises one of a paper or cardboard web, as recited in claim 4; the impregnating agent is applied to a web having a basis weight over 40 g/m<sup>2</sup>, as recited in claim 5; between said wide nip and said coating device, no other web processing devices are provided, as recited in claim 6; at least one guide device is arranged between said wide nip and said coating device, as recited in claim 7; said wide nip calender further comprises a heating device, as recited in claim 8; said heating device is formed by said back pressure element, as recited in claim 9; said heating device comprises a surface structured to guide the web through said wide nip, and said surface having a temperature adjustable to at least 200°C, as recited in claim 10; further comprising a drying area located downstream of said coating device, as recited in claim 12; said wide nip is heated to a temperature higher than a temperature in said drying area, as recited in claim 13; said wide nip is adjustably heated to at

least a plasticizing temperature of web fibers of the web, as recited in claim 14; and further comprising a reeling device arranged downstream of said coating device, wherein no glazing device is arranged between said coating device and said reeling device, as recited in claim 15.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1 – 10 and 12 – 15 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

2. Over Baldini in view of Honkalampi and further in view of Wurlz

Applicants traverse the rejection of claim 11 under 35 U.S.C. §103(a) as being unpatentable over BALDINI in view of HONKALAMPI and further in view of WURLZ et al. (U.S. Patent No. 6,284,097) [hereinafter “WURLZ”].

Applicants note that WURLZ fails to teach or suggest any of the subject matter noted above as deficient in BALDINI and HONKALAMPI, such that no proper combination of the applied art can render the instant invention unpatentable.

Moreover, Applicants submit that, as WURLZ fails to teach or suggest the requisite motivation or rationale for combining the disparate teachings of web treatment in BALDINI and HONKALAMPI, the asserted combination of documents is improper and should be withdrawn.

Further, Applicants submit that, as WURLZ cannot be applied against the pending claims, for the reasons set forth below, the instant rejection is improper and must be withdrawn.

Applicants note that WURLZ cannot be applied against the pending claims under 35 U.S.C. § 103(a). Under 35 U.S.C. § 103(c), subject matter developed by another person, which qualifies as prior art only under one of 35 U.S.C. § 102(e), (f), or (g) shall not preclude patentability under 35 U.S.C. § 103 where the subject matter and the claimed invention (filed in the U.S. Patent and Trademark Office after November 29, 1999) were, at the time the invention was made, commonly owned. In other words, if, at the time the instant invention was made, the instant invention and WURLZ were commonly owned, WURLZ cannot be used as a reference against the claimed invention under 35 U.S.C. § 103.

In this regard, Applicants note that the instant invention and WURLZ were commonly owned at the time of the instant invention, such that WURLZ cannot be used as a reference against the pending claims under 35 U.S.C. § 103(a).

Therefore, for this additional reason, Applicants submit that the instant rejection of claim 11 is improper and should be withdrawn.

***New Claim is Allowable***

Applicants submit that newly presented claim 33 is allowable over the art of record. In particular, Applicants note that claim 33 generally corresponds to original claim 11, which for the reasons set forth above is allowable over any proper combination of BALDINI, HONKALAMPI, and WURLZ.

Moreover, as WO '585 fails to provide any disclosure or even a suggestion of a film press, and certainly no suggestion that the identified calender is a film press, Applicants submit that new claim 33 is allowable over the art of record.



Therefore, Applicants request that the Examiner consider the merits of new claim 33 and indicate the allowability of the same.

***Application is Allowable***

Thus, Applicants respectfully submit that each and every pending claim of the present invention meets the requirements for patentability under 35 U.S.C. §§ 102 and 103, and respectfully request the Examiner to indicate allowance of each and every pending claim of the present invention.

***Authorization to Charge Deposit Account***

The undersigned authorizes the charging of any necessary fees, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, to Deposit Account No. 19 - 0089 in order to maintain pendency of this application.

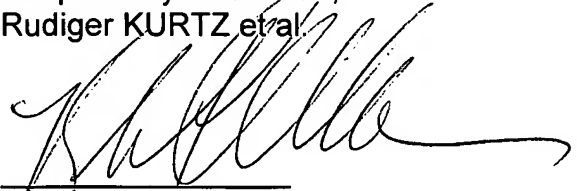
**CONCLUSION**

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of claims 1 - 15. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully Submitted,  
Rudiger KURTZ et al.

A handwritten signature in dark ink, appearing to read 'Neil F. Greenblum', written over a horizontal line.

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